

inside of the closed vessel is pressurized by gas generated as a result of the evaporation of the solvent.

6. (Amended) The process for producing anatase titanium oxide according to claim 1, wherein inert gas is introduced into the closed vessel to pressurize the inside of the closed vessel.

7. (Amended) The process for producing anatase titanium oxide according to claim 1, wherein at least one member selected from the group consisting of acidic materials, alkaline materials, organic polymers, and inorganic materials is added to the titania sol solution, the titania gel, or the titania sol-gel mixture.

10. (Amended) The process for producing anatase titanium oxide according to claim 8, wherein the substantially organic solvent-free aqueous titania sol solution, titania gel, or titania sol-gel mixture is heat treated in the temperature range of 120 to 270°C in the closed vessel.

11. (Amended) The process for producing anatase titanium oxide according to claim 8, wherein the contents of the closed vessel are heated to evaporate the solvent contained in the substantially organic solvent-free aqueous titania sol solution, titania gel, or titania sol-gel mixture, whereby the inside of the closed vessel is pressurized at a pressure of 1.5 to 33 atmA by gas generated as a result of the evaporation of the solvent.

12. (Amended) The process for producing anatase titanium oxide according to claim 8, wherein a titanium alkoxide is provided as a starting material for the production of a substantially organic solvent-free aqueous titania sol solution, titania gel, or titania sol-gel mixture and is hydrolyzed in aqueous hydrogen peroxide or aqueous ozone and, at the same time, is dissolved in aqueous hydrogen peroxide or aqueous ozone to produce a substantially organic solvent-free aqueous titania sol solution, titania gel, or titania sol-gel mixture.

a2 13. (Amended) The process for producing anatase titanium oxide according to claim 8, wherein at least one member selected from the group consisting of water-soluble metal salts, acidic materials, alkaline materials, organic polymers, inorganic materials, and metal alkoxides other than titanium alkoxides is added to the substantially organic solvent-free aqueous titania sol solution, titania gel, or titania sol-gel mixture.

14. (Amended) The process for producing anatase titanium oxide according to claim 8, wherein inert gas is introduced into the closed vessel to pressurize the inside of the closed vessel.

17. (Amended) The process for producing a titanium oxide coating material according to claim 15, wherein the titanium oxide coating material produced by treating the titania sol solution, the titania gel, or the titania sol-gel mixture with ozone gas is further diluted with an organic solvent.

a3 18. (Amended) The process for producing a titanium oxide coating material according to claim 15, wherein the titania sol solution, the titania gel, or the titania sol-gel mixture is treated with ozone gas and at least one member selected from the group consisting of titanium oxide powder, titanium oxide slurry, and a mixture thereof is mixed with the treated product to produce a titanium oxide coating material.

19. (Amended) The process for producing a titanium oxide coating material according to claim 15, wherein at least one member selected from the group consisting of acidic materials, alkaline materials, surfactants, and metal alkoxides other than titanium alkoxides is added to the titania sol solution, the titania gel, or the titania sol-gel mixture.